searching for the pilot reference in accordance with the ordered groups; and

terminating the searching upon acquisition of the pilot reference.

40. (Currently Amended) A device comprising:

a searcher element configurable to receive and correlate a first set of samples in accordance with a plurality of groups of PN sequences to provide correlated values used to detect a gated pilot reference, wherein the plurality of groups comprise an overall code space in which the pilot reference may be found, wherein a first group contains all possible specific pilot offsets for PN_INC = max, and are ordered based on likelihood of detecting the pilot reference in each of the groups, and wherein the plurality of groups are used to searched for the pilot reference based on their order and searching terminates upon acquisition of the pilot reference.

Remarks

Claims 1-40 are currently pending in the application. Claims 1, 2, 8, 11, 25, 26, 32, 36, 38, 39, and 40 have been amended.

Elections/Restrictions

The Examiner has stated that claims 38 and 39 are directed to an invention that is independent or distinct from the invention originally claimed and has stated claims 38 and 39 are withdrawn from consideration as being directed to a non-elected invention. Claims 38 and 39 are simply Beauregard-style claims covering software implementations of the method of claim 8. Thus, it is believed that the restriction requirement is improper and its withdrawal is respectfully requested.

Rejections under 35 U.S.C. §112

The Examiner has rejected claims 38 and 39 under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. The Examiner has stated that the claimed subject matter was not described in the specification in such a way as to enable one skilled in the

art to make and/or use the invention. As mentioned above, claims 38 and 39 are simply Beauregard-style claims covering software implementations of the method of claim 8. As claim 8 is enabled by the specification, claims 38 and 39 are as well. The Examiner's attention is directed to paragraphs [0060] - [0078] and Fig. 6 which describe and show a detailed embodiment of a process to search for a gated pilot reference in a defined code space. A skilled software engineer can certainly make and use the invention of claims 38 and 39 based upon the specification.

Rejections under 35 U.S.C. §103

The Examiner has rejected claims 1-37 and 40 under 35 U.S.C. §103(a) as being unpatentable over XP-002198525. Claims 1, 2, 8, 11, 25, 26, 32, 36, and 40 have been amended. These claims have been amended in order to assist the Examiner in furthering the case. For the reasons set forth below, it is respectfully submitted that the claims are patentable over the applied art.

Claim 1 contains the limitation "wherein the first group contains all possible specific pilot offsets for PN_INC = max." This is not shown or suggested by the applied art.

In the cited art, the code sets are grouped into an active set, a candidate set, a neighbor set and a remaining set. None of these groups is formed to contain all possible specific pilot offsets for PN_INC = max. Rather, the active set is formed by those pilots already acquired and associated with sectors currently serving the access terminal. The candidate set is determined by pilots already acquired having a certain minimal signal strength, but not associated with sectors currently serving the access terminal. The neighbor set is determined by pilots that are likely candidates for inclusion in the active set (because they are known to be used nearby, hence "neighbor set") but that are not included in the active set or candidate set. And the remaining set is all other possible pilots. See XP-002198525 page 6-43 lines 2-18. Moreover, the active set and candidate set cannot be the claimed first group, because the pilots in the active set and candidate set have by definition already been acquired.

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To assist the Examiner, the Examiner's attention is directed to paragraphs [0043] – [0049] and [0065] – [0070] of the specification where an example is given wherein max = 4. As shown in paragraph [0067], in this example, the code space can be divided into four groups with each of the four groups containing an equal number of code offsets. [It should be noted that group 3 and group 4 could be arranged differently, such as in a single group]. This specific division of code space helps with searching because, as described in paragraph [0068], if a PN_INC of 4 is used by a given CDMA base station, the PN offset of its gated pilot will be within group G1, as it contains all possible specific pilot offsets for a PN_INC of 4. If a PN_INC of 2 is used, its PN offset will be within group G1 or G2. If a PN_INC of 1 is used, its PN offset will be within one of groups G1, G2, G3 or G4. By searching G1 first, for CDMA base stations having using a PN_INC of 4, their pilot should be acquired without having to search groups G2-G4. Similarly, for CDMA base stations using a PN_INC of 2, their pilot should be acquired without having to search groups G3 or G4.

As claim 1 contains a limitation not taught or suggested by the applied art, it should be allowable, as should claims 2-7 which ultimately depend therefrom.

Claims 8, 25, 26, 38, 39 and 40 all contain similar limitations. As such it is believed that they are allowable as well. The remaining claims should be allowable as well as all being ultimately based upon an allowable claims.

Furthermore, claims 30-37 set forth specific pilot offsets contained in either the first or second group as disclosed in the example discussed above where max = 4. Again, these specific groupings are not disclosed or suggested in the applied art. These claims should be allowable.

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CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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